

REMARKS

The applicant provides the following remarks to the non-final action mailed January 16, 2008.

1. Cancellation of Claims. The applicant without traverse elected Group II, claims 28-30 in the reply to restriction filed on October 24, 2007. The applicant without prejudice cancels claims 1-27. The applicant does not waive any right to have claims 1-27 examined without any reduction in breadth or scope in a subsequently filed continuation, division, continuation in part or other continuing application.

2. Priority. This application is the United States National Stage of PCT/US03/35057, filed Monday November 3, 2003, which claims the benefit of United States Provisional Patent Application No. 60/423,231, filed November 2, 2002, which had a one year anniversary which fell on Sunday November 2, 2003. Because the anniversary date of the US Provisional fell on a Sunday, the PCT/US03/350057 designating the United State, filed on the following Monday November 3, 2003 was timely filed within the one year period. Accordingly, the United States National Stage patent application properly claims the benefit of United States Provisional Patent Application No. 60/423,231 as the earliest priority date.

3. Section 112 Concerns. The applicant has amended claim 29 to depend from claim 28 and has amended claim 30 to depend from claim 29 to address the antecedent basis concerns of the office.

4. Section 102 Concerns-Novelty. The office has raised novelty concerns with respect to claims 28-30 as being anticipated by United States Patent 7,053,029 to MacDonald et al. ("MacDonald"). A claim is anticipated only if "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed.

Cir. 1987); MPEP 2131. "The identical invention must be shown in as complete detail as is contained. . .in the claim." Richardson v. Suzuki Motor Co., 868 F.2d 1225, 1236 (Fed. Cir. 1989). Moreover, the elements must be arranged as required by the claim. En re Bond, 910 F.2d 831 (Fed.Cir. 1990); MPEP 2131. Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim. Toro Co. v. White Consolidated Industries Inc., 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999) (meaning of words used in a claim is not construed in a "lexicographic vacuum, but in the context of the specification and drawings"). MPEP 2111.01 IV.

The MacDonald reference can be readily differentiated from the invention of claim 28. The soap of MacDonald is preferably made by mixing two components. As a specific example, a first component is a liquid soap and a dye. The second component includes a material that acts on the dye to produce a color change in the dye (specifically "ascorbic acid and iron choride" as indicted starting at col. 1, line 65). MacDonald does indicate that "Thus the components can be kept separate until washing begins. . .or may be kept together with one component inactive by some means, such as microencapsulation, until sufficient physical stimulus results in their effective mixing." *See MacDonald, col. 3, starting at line 33.*

The applicant's invention can be differentiated from the MacDonald reference because the MacDonald reference does not teach the step of "applying a liquid hand soap to hands, wherein said liquid soap comprises a non-aqueous carrier containing a plurality of capsules that rupture after a duration of time when exposed to water". *See claim 28, element a.* As to this step, the MacDonald reference does not teach the claimed non-aqueous carrier at all and does not teach the claimed non-aqueous carrier which contains a plurality of capsules which are stable until exposed to water.

The office indicates that these limitations are presented in applicant's claim 28. *See action at page 4 "Regarding the claimed limitations to wherein said liquid soap comprises a non-aqueous carrier containing a plurality of capsules or population of*

capsules that rupture after a duration of time when exposed to water. . .". However, the office does provide any specific citation in MacDonald which teaches the claimed "non-aqueous carrier" of applicant. Nor does the office provide any citation to a teaching by MacDonald of a plurality of capsules contained in the non-aqueous carrier which rupture after a duration of time when exposed to water. The only reference to any type of capsule made at all in the MacDonald reference is a single phrase "such as microencapsulation". See *MacDonald, col. 3, lines 35-36*. This general use of term does not teach that the capsule is stable in a non-aqueous carrier. Further, this general use of the term does not disclose the claimed arrangement of the elements of claim 28 in which a non-aqueous carrier contains a plurality of non-aqueous carrier stable capsules.

Additionally, the vague and general representation of the term "microencapsulation" in the MacDonald reference is insufficient to enable a person of ordinary skill to make and use applicant's claimed invention. It is well understood that a prior art reference must be enabling under Section 35 U.S.C. §112, first paragraph. The examiner has indicated that MacDonald et al. is silent with respect to the liquid hand comprising capsules that rupture because the presumption is supported by the use of similar materials and in similar production steps.

However, the applicant does not believe that this presumption can be made because there is numerous and wide variety of compositions from which a liquid hand soap can be made. One of the prominent problems "with regard to providing perceivable sensorial indicia or providing perceivable sensorial reinforcers as a solution to problems of compliance with hand washing procedures, may be that cosmetic carriers cannot contain or act as the conveyance for components, elements, or compositions activated by water. One aspect of this problem can be that the carrier itself may contain sufficient water to activate such aqueous activated components." See *Specification beginning at page 6, line 24*.

A general reference to "microencapsulation" as used in the MacDonald reference does not solve this problem because a very large number of microcapsule or coating

materials are known which dissolve in soap compositions (see the list in applicant's specification beginning at the first paragraph of page 13 -- "allow selectably variable release of the solid or liquid material(s) after exposure to aqueous material for a duration of time") and may not be able to be used to separate the first and second components of the liquid soap such as the Clear Skin Cleanser referred by the examiner and other components described by MacDonald. Accordingly, it is not clear that the plurality of capsules described by the applicant could be used with the MacDonald technology.

Additionally, there is a wide and numerous variety of aqueous stable capsules and coatings such as a copolymer of polyvinylmethyl ether and maleic anhydride (60/40) or latex which require considerable force by rubbing to release encapsulated material. Based on the description of the MacDonald reference which includes the language "sufficient physical stimulus results in effective mixing" it is reasonable to infer that MacDonald teaches in the direction of this type of capsule and teaches away from the type of capsules used by applicant.

Additionally, there are a wide and numerous variety of carrier materials both aqueous based and non-aqueous and mixtures thereof.

The vague use of the term "microencapsulation" in the MacDonald reference only suggests a starting place for experimentation for the types of compositions described in the reference and which would lead a person of ordinary skill away from the type of carriers and capsules described by the applicant and as such does not convey any information relevant to applicant's claimed invention.

Accordingly, the applicant does not believe that at the time of applicant's invention the use of a non-aqueous carrier containing a plurality of non-aqueous stable capsules which release an encapsulated material upon exposure to water had been discovered or that any presumption can be made from the general field of microencapsulation at the time of the invention which would enable the general language

used in the MacDondald reference in a manner which would encompass applicant's invention of claim 28.

The applicant has amended claim 28 to clarify the limitations and arrangement of the step of providing the liquid soap, as follows:

- a) providing a liquid soap which includes:
- i) a non-aqueous carrier;
 - ii) a plurality of non-aqueous carrier stable capsules entrained in said non-aqueous carrier; and
 - iii) an amount of encapsulated material contained in each of said plurality of non-aqueous carrier stable capsules;

Claim 28, element a.

The applicant has also clarified that the plurality of capsules, stable in the non-aqueous carrier, rupture due to exposure to an amount of water. *See Claim 28, element d.* This limitation is also differentiable from the MacDonald reference which teaches that "physical stimulus results in their effective mixing." *See MacDonald, col. 3, lines 36-37.* Rather than the claimed rupturing by exposure to water.

The claimed limitation of "a non-aqueous carrier" is supported in the specification for example as follows:

"Certain embodiments of the invention can include, one or more of, ethylene glycol, polyethylene glycol, polypropylene glycol, 1, 4-butanediol, 1, 5-pentanediol, 1, 6-hexanediol, pentaerythritol, neopentyl glycol, glycerol, sorbitol, erithrithol, methanol, ethanol, isopropanol, 1-propanol, pentanol, hexanol, phenoxyethanol, benzyl alcohol, or the like. This list is not meant to be exhaustive and a carrier in accordance with the invention can comprise any substantially non-aqueous carrier(s) which as to certain embodiments of the invention can be, individually or in combination, water miscible;

water immiscible; approved for application to skin, hair, or nails (whether human or animal); or formulated for other applications, as described above. As such, this list is intended to provide a sufficient number of examples of carriers so that one of ordinary skill in the art can make and use the numerous and varied embodiments of the invention.”

Specification at page 11, lines 17-23. See also, specific Examples 1-5, pages 17-20.

The claimed limitations of “a plurality of non-aqueous stable capsules” and “rupturing said plurality of capsules by exposure to said amount of water to release said encapsulated material” is supported by the specification for example as follows:

“Certain embodiments of the invention can further include a capsule (the term “capsule” is intended to encompass any type or kind of coat, coating, wall, capsule, or encapsulating material) that can be mixed with, held, contained within, or conveyed in one or more non-aqueous carrier(s), individually or in combination, without being ruptured. The capsule can contain, or provide a surface for deposition of, solid or liquid material(s) released when exposed to aqueous materials (the term aqueous material is intended to encompass any type or kind of aqueous system, including, but not limited to, water, purified water, water containing an amount of soluble or insoluble material(s), or material(s) containing an amount of water). . . Certain embodiments of the invention include capsules having a central reservoir of solid or liquid material(s) surrounded by one or more capsules made of urea-formaldehyde, various forms of gelatin, polyvinyl alcohol, polyvinyl pyrrolidone, polyvinyl methyl ether, polyvinyl emthyl ether/maleic anhydride copolymer, carboxy methyl cellulose, hydroxy ethyl cellulose, cellulose acetate butyrate, cellulose acetate propionate, polyvinyl alcohol/acetyl copolymer, or the like.”

Specification at pages 12-13, lines 24-32 and lines 1-8. See also, specific Examples 1-5, pages 17-20.

Because the MacDonald reference does not teach all the elements of the claimed invention, or the arrangement of the elements is different than set forth in the MacDonald reference, or because the MacDonald reference does not enable the use of non-aqueous carrier stable capsules in a non-aqueous carrier to release an encapsulated substance when exposed to water the MacDonald reference does not anticipate claim 28 or any claims made dependent thereon.

5. Section 103 Concerns. The office has raised a concern that claims 28-30 are obvious in view of United States Patent No. 7,053,029 to MacDonald et al. (“MacDonald”).

To reject a claim based on a prior art reference or by combining prior art elements according to known methods, the office must resolve the Graham factual inquiries and provide a finding that the prior art included each element claimed. *MPEP §2143 A (1)*. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. *KSR, 550 US at ___ 82, USPQ2d at 1395*. If any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious to one of ordinary skill in the art. *MPEP §2143 A (1)*.

Additionally, “If the proposed modification or combination of the prior art would change the principal of operation of the prior art invention being modified, then the teaching of the references are not sufficient to render claims prima facie obvious” *MPEP Rule 2143.01 VI*.

First as above-discussed, and incorporated here by reference, the MacDonald reference does not teach all the claimed limitations of the invention as required under *MPEP §2143 A (1)*. Claim 28 presents the steps for a specific arrangement of a non-aqueous carrier in which a plurality of non-aqueous carrier stable capsules are contained

which upon exposure to water rupture to release encapsulated materials to provide an indicia of effectiveness in hand washing.

Second the MacDonald reference utilizes a first component and a second component which are mixed by sufficient physical stimulus to result in their effective mixing resulting in the production of an indicator. The modification of the MacDonald reference to further include the step of including an amount of water to release the second component into the first component would change the function of the MacDonald invention.

Third the MacDonald reference is non-enabling under Section 112, first paragraph with regard to making and using the invention of claim 28 and the dependent claimed inventions. The MacDonald reference does not provide any example whether constructive or reduced to practice of a microcapsule which remains stable in a non-aqueous carrier and releases an encapsulated material upon exposure to an amount of water.

Fourth, there is no suggestion whether inherent or express in the MacDonald reference to use a non-aqueous carrier in which a plurality of a non-aqueous stable capsules contain an amount of encapsulated material which can be released by exposure to water. To the contrary, MacDonald expressly identifies that the invention includes a soap and an indicator that changes color over time but does not provide any particulars as to the composition of any particular soap or the particulars of any particular capsule that can be used with any particular soap.

Fifth, there is no manner of predicting from the MacDonald reference whether a non-aqueous carrier can contain a plurality of capsules which afford an amount of encapsulated material which can be released by exposure to water.

Sixth, in addition as above discussed, MacDonald teaches away from the claimed invention because embodiments of the MacDonald invention teach sufficient physical

stimulus to provide effective mixing while the instant invention teaches rupture of the plurality of capsules due to exposure by an amount of water.

Because the MacDonald reference does not teach all the limitations of claim 28 as amended, or because the modification of the MacDonald reference to operate as set forth in claim 28 would alter the function of the technology described, or because the MacDonald reference does not enable the use of microcapsules as claimed by the applicant, does not suggest the claimed limitations, or the it cannot be predicted that a non-aqueous carrier can contain a plurality of capsules as described a prima facie case of obvious cannot be made by the office. The applicant respectfully requests allowance of claims 29-35.

New Claims 31-35. The applicant respectfully requests examination of newly added claims 31-35. Because claim 28 provides a generic linking claim which the applicant believes is allowable the addition of 31-35 do not require an additional search on the part of the office.

CONCLUSION

The applicant has amended claim 28 to make clear the differences between the claimed invention and the MacDonald reference. The applicant has differentiated the claimed invention from the MacDonald reference to address the Section 102 issues and provided the same and additional arguments with respect to the Section 103 issues raised by the office in view of the MacDonald reference. The applicant has addressed Section 112 concerns by amending the dependency of claims 29 and 30.

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Respectfully Submitted,

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